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ABSTRACT

This publication provides a brief analysis of the literature since 1960 which deals with the information interview (defined as any interview in which one person is attempting to understand what information another person wants) as it involves library personnel: a comprehensive bibliography for that period: and a guide to the most useful items for practitioners, researchers, and teachers. A coding system for the citations is explained, and the bibliography is divided under three headings: (1) comprehensive considerations of the information interview, (2) primary items, and (3) additional items. Subject and author indexes are included. (FM)

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The Information Interview

A Comprehensive Bibliography and an Analysis of the Literature

by

Wayne W. Crouch

August 1, 1979

ERIC Clearinghouse on Information Resources
Syracuse University

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My comments on the importance of definitions, generalizability and factual accuracy parallel an approach to the evaluation of information which is presented in a book, Evaluating Information, by Jeffrey Katzer, Kenneth H. Cook, and Wayne W. Crouch (Addison-Wesley, 1978). I am indebted to my coauthors for a better understanding of how to approach a project such as this. In that book we used the term "trustworthiness" instead of "factual accuracy." Katzer later suggested the latter term, and I too find it more appropriate.

W. C.

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I. INTRODUCTION

Librarians have long recognized that their communication with library users is a vital aspect of library service. Comment on that aspect of librarianship dates back to at least Wyer (1930) but has become more pronounced in the past ten to twenty years. The importance of communication with users is now universally recognized, some library schools provide specific training, and research as well as commentary is being reported in the professional literature.

Roloff (1979) provides a reasonable extensive review of the literature, Rothstein (1977) provides a delightful historical perspective as well as a review of many articles, and Lynch (1977) and Jennerich (1974) also undertake comprehensive statements about previous commentary and research. However, the latter two are dissertations and thus publicly available only by purchase from University Microfilms International.*

The purpose of this bibliography is to provide a brief analysis of the literature since 1960, a comprehensive bibliography for that period, and a guide to the most useful items for practitioners, researchers, and teachers.

What Is the Topic?

In general, the literature provides little guidance as to exactly what this topic is about. The title of this work includes the term "information interview," and librarians' "communication with library

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*Lynch has published an article (1978) based on her dissertation as listed in the bibliography, but little of the literature review is included there.

users" is referred to in the first paragraph. Roloff (1979) uses the phrase "communication at the user-system interface." And, many authors have referred to the "reference interview" (e.g., Katz (1978) in his text on reference work).

However, most authors do not give formal attention to a definition of their topic. Katz (1978), for instance, seems to have public or academic library reference desks in mind when he discusses the reference interview, but he does not discuss the applicability of his comments to other situations such as a special library. He does imply, however, by including a separate section in the text, that interviews are different for computer-based reference service.

Roloff (1979) is unusual in giving explicit attention to his topic. He says:

> ...user-system interactions occur throughout the library (e.g., circulation, acquisition, cataloging, etc.) and not only within the area of traditionally defined "reference" functions. If improving the effectiveness of libraries in general is one of the reasons for studying communication in libraries, the broader perspective should be taken. At the same time, it is clear that users do not interact with "librarians" alone, if that term is interpreted in the narrow sense to include only those individuals who are professionally trained to be librarians. Users, in most libraries, communicate with nonprofessionals as well as professionals; part-time staff as well as full-time staff; student assistants as well as adults. It thus seems reasonable to again think more broadly in terms of "library staff" rather than the specific "reference librarian" or "librarian." Consequently, communication at the user-system interface includes <u>any</u> communication activities or processes which occur between a user and the staff of a library in the process of attempting to satisfy his/her information needs. (p. 2)

Jennerich (1974) gives a definition for the concept "interview":

> ...a face-to-face meeting between a professional (librarian, counselor, etc.) and another individual who is seeking help. It is the responsibility of the professional to determine the nature of the interviewee's needs through carefully considered conversation with him. (p. 2)

And, she analyzes the literature in terms of interviews for reader's advisory service, adult education, and reference service.

The topic chosen for this bibliography was the information interview. It is defined as being any interview in which one person is attempting to understand what information another person wants. That definition was used because of this author's contention that librarians are not the only ones who do such interviews. When an engineer meets with a marketing specialist, the company may well come out ahead if the engineer accurately determines the marketing specialist's information needs and meets them. Similar situations occur with accountants, executives of any sort, social workers, physicians, and many others. Librarians are sometimes specifically trained to handle the situation and the professional norm that they should be experts is growing in acceptance, but it seems to this author that the process itself is a common one.

Thus, the term "information interview" is nearly synonymous with "reference interview" except that in principle it does not necessarily involve a librarian. In fact, no literature was found for people other than librarians or other library personnel conducting an information interview. However, the term is retained in the title because of this author's belief that librarians must adapt terminology that reflects their involvement in fundamental information processes of society.* There is no logical or semantic reason why the term "reference interview" cannot take on a wider application, but the close association with "reference desks" would be hard to overcome.

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*According to Gardiner (1969) Pierce Butler argued a similar point of view about four decades ago.

Identifying items to be included or excluded from the bibliography was not difficult except (1) for those items related to "counseling" and (2) for those items related to "the search" for information. With regard to the former, the information interview as defined here has much in common with the "counseling interview." At the extremes, the information interview with a focus on information seems quite different from a counseling interview with a focus on problem solving, advice, and therapy, but each process includes something of the other. Literature on readers' advisory service in libraries and explicit discussions of librarianship as a type of counseling demonstrate the dilemma clearly. Both are excluded from this bibliography because the issues of (1) the similarity of the information interview and counseling, and (2) the extent to which librarians should do more counseling are worthy of an independent study. Included in the bibliography are only those items which relate counseling concerns clearly to an interview whose primary focus is the information needs of another person. For an introduction to what has been left out, see Penland (1970) and Dervin (1977). Penland discusses the relationship between counseling and librarianship. Dervin defines people's information needs in such a way that most interviews related to human services (e.g., social work and medical as well as library and counseling) would in part be information interviews.

The second area of difficulty is related to "the search" for information. Sometimes an interview precedes and is separate from a search by the librarian for the information that a user needs. However, many times the interview and the search overlap. And even if they don't, the way in which the librarian plans to do the search will

affect the way the interview is conducted. Thus, research and commentary on searching are frequently very suggestive of what should happen during the interview. However, items on "the search" were included only if they explicitly dealt with the interview.

The fact that there is no body of literature each item of which identifies itself as meeting a stated definition is an important challenge. Definitions of topics are important because they specify the range of applicability of propositions. When an author does not define his topic, the reader cannot be sure what situations he intends for his comments, propositions, or findings to apply to. When a field does not define an area of study, it reflects the lack of consensus as to which of many diverse experiences can be studied as a single situation or problem. Can we study and comment on all situations which meet the definition given above for the information interview? This author asserts that we can by using the term, but there is no consensus. Other authors have written about either (1) the reference interview in a special library, (2) the reference interview that precedes a computer-based literature search, or (3) the reference interview in a public or academic library. Are those situations sufficiently similar so that comments and research findings can apply to all? Or, do they have only a certain core in common with special considerations needed in each case? At the other extreme, of course, would be very little or nothing in common such that each needs to be treated entirely separately.

As practitioners, researchers, and teachers grow in their understanding of the subject matter, these issues will be addressed. If they are resolved, at least in part, knowledge of the information interview,

the reference interview, the user-system interface, or whatever, will be increasingly useful to information professionals of all kinds and to nonprofessionals when they find themselves involved in finding out what information another person wants.

How Do We Know about the Information Interview?

Assessing what we know about the information interview requires evaluation of the information presented by practitioners, researchers, and teachers. This author finds it useful to distinguish between two major issues when evaluating information--generalizability and factual accuracy.

The previous discussion of topic definition was concerned with generalizability. We know very little about how far we can generalize findings or assertions which themselves are always drawn from some specific experiences of the author (systematically or unsystematically obtained).

Research is essentially the systematic seeking of experience, and one aspect of such a systematic approach is often procedures that make it possible to be confident in generalizing from findings. The procedures usually revolve around some type of random sampling and make it possible to extend the findings beyond the specific situations from which they came with some specifiable confidence. No such procedures were used in any study of the information interview that was located in preparing this bibliography.

Such procedures are useful, but are in fact only a short cut to use in place of repeated observation in all of the situations which might be generalized to. In the extreme it is tautological to say that

factually accurate findings which have been observed in a variety of settings generalize to all of those settings, but it is a useful tautology. The literature cited in this bibliography includes similar findings in a variety of settings. The paucity of knowledge on generalizability could be lessened somewhat by a systematic consideration of the range of situations over which the same findings have been reported. Doing so is beyond the scope of this report, but it is this author's impression that there is in fact a core of knowledge about interviewing that applies to public and university library reference desks, special library information services, and interviews which precede computer-based bibliographic searches. Such consideration of the similarity of commentary and findings across situations will increase knowledge of generalizability and lead to useful definitions.

Factual accuracy is a separate issue in the evaluation of information. It refers to the accuracy of commentary or findings for the situations that they were derived from. For instance, Gothberg (1974) found that users were more satisfied with a reference interview when librarians were acting in an "immediate" way than when they were acting in a "nonimmediate" way. Factual accuracy has to do with whether that statement is true for the two particular librarians who participated in the study when they were interviewing the actual users who were studied in that particular library at that particular time. Errors in observation, data analysis, or interpretation could have led to an erroneous conclusion. Similarly, when Horn (1974) describes library users he is apparently drawing on his experiences in particular libraries at particular times. Selective perception

and memory, inaccurate inferences from observations, and logical errors are possible causes of inaccurate conclusions. The point is that reports are more or less accurate for a variety of reasons, but those reasons are independent of potential generalizability. Findings can be factually accurate but not generalizable beyond the exact conditions that they were derived from.

Commentary and findings reported for the information interview vary as to how their factual accuracy can be evaluated. Most items can be clearly identified as either

1. a report of personal experience (or no methodology specified),
2. an interpretation of theory or research from other areas,
3. the development of theory for the information interview independent of theory and research in other areas, or
4. systematic research.

Each citation in the bibliography is coded as to which of the above it represents. Some items are given more than one of the four codes.

About three-quarters of the items do not rely on any method of systematic research. Some are clearly reports of personal experiences, or apparently so, and are coded in the first category above. Others fall into categories 2 and 3 above but do not include any systematic testing of the interpretation or theory put forth. (The latter are not coded in category 1, but those that do include systematic research are coded in category 4 as well as in category 2 or 3.)

Many of the articles in category 1 share valuable personal insights and provide suggestions for practice and hypotheses to be systematically tested in a wider setting or under other conditions. Unfortunately, there is little a reader can do, short of additional

research, to check the factual accuracy of what is suggested except to compare it with his own experiences or try it himself. Professional norms do develop in this way, and if the members of the profession are insightful, the quality of service that the profession provides improves.

Another way of coming to better understand the information interview that relies on personal insight is the interpretation of theory and research from other areas. About two-thirds of the items involve this approach. Counseling and nonverbal communication are areas seen by many authors as having something important to say to librarians. And, various areas of communication, cognitive psychology, social psychology, and sociology are also considered. As mentioned above, these interpretations can be tested by systematic research. When the item includes such a test it is appropriately coded. However, about 75 percent gave little indication of any test. Twenty-five percent reported some type of systematic research.

A few authors have specifically tried to develop theory for the information interview. Six such items are identified. Only Taylor's theories (1962 and 1968) seem to have had a wide impact, but even then little has been done to build on them since they were published over a decade ago.

Finally, some items report on systematic research which provides evidence beyond personal experience to support propositions. Overall, about one-third do, and they are a significant step towards systematic control of the numerous potential errors of observation and interpretation that a single observer is subject to in the course of his normal experience.

Thus, authors have relied on a variety of means to gain knowledge of the information interview. Each requires different considerations when evaluating the commentary and findings. The items in this bibliography are coded as to how the author proceeds so that readers can readily find articles with similar or diverse approaches as their needs dictate.

What Do We Know about the Information Interview?

Roloff (1979) identified a useful way of categorizing communication as intrapersonal or interpersonal.* He says,

> Communication processes that occur at the user-system interface can, in the main, be categorized as either intrapersonal (where the emphasis is placed on information-processing characteristics of the communication participants), or interpersonal (where the emphasis is placed on the interaction and relationship of participants, including verbal and nonverbal communication). (p. 2)

The distinction is congruent with the more detailed classification of topics which is provided in this bibliography. Each citation is coded according to the topic covered in the cited item. Seven major topics have been discussed and an "other" category is included. The topics are

1. what users are like,
2. what librarians are like,
3. what librarians need to find out from users about their information needs,
4. how the interview should be conducted,
5. the importance of the interview for successful information service,

---

*Hanneman (1975) discusses these levels plus "small groups in organizations and networks" and "mediated" as useful for the study of communication.

6. training,

7. other.

The first two have to do with intrapersonal communication, the first focusing on the user and the second on the librarian. The next three deal with aspects of interpersonal communication. Number three might be thought of as the technical considerations for the information interview. A number of items discuss what librarians need to find out from users about their information needs. The fourth, how the interview should be evaluated, is concerned more with "social" considerations that are probably about the same in any interview between a professional and a client. Techniques for establishing rapport, appearing willing to help, and asking unbiasing questions are examples of topics covered.

Two additional topics do not fit into the intra/interpersonal scheme. Some articles emphasize importance of the interview (the sixth category) rather than the nature of the interview. And, some emphasize training (the seventh category), usually in addition to one of the interpersonal topics. Finally, some articles touched upon a topic which few others did. They were classified in the "other" category.

This list of topics, then, reflects this author's analysis of the kinds of things we know about the information interview. For a topic to be listed, accumulated findings and commentary had to be significant. There is information in the literature on each of these topics. In addition, items with extensive reviews of the literature were cited earlier in the introduction. They, along with coverage of the topic in a text (Katz, 1978) and a research report (Jahoda, 1976) provide a substantive review. These six items are cited separately in the first section of the bibliography.

The Bibliography

The bibliography is divided into three parts and includes all citations that could be located to items published since 1960. It is restricted to printed materials such as books, journal articles, dissertations and theses, reports, papers, and proceedings. Only English language items were considered. It is not limited to items in ERIC.

The three parts are

- Comprehensive Considerations of the Information Interview
- Primary Items
- Additional Items

The first is self explanatory. The second contains items judged to be of greatest value to practitioners, researchers, and teachers. And, the third contains all additional citations.

References Cited That Are Not in the Bibliography

Gardiner, G. L. "The Empirical Study of Reference." College and Research Libraries 30 (March 1969):130-155.

Hanneman, G. J. "The Study of Human Communication" in Communication and Behavior. G. J. Hanneman, W. J. McEwen, eds. Reading, MA: Addison-Wesley, 1975, pp. 21-46.

Wyer, James I. Reference Work. Chicago: American Library Association, 1930.

II. CODING SYSTEM FOR THE CITATIONS

Each citation in this bibliography is coded according to the system outlined below. Except for citations to comprehensive items (2.5), each citation receives as many codes as are appropriate from each of the five major categories, and the major categories are such that at least one code is always assigned from each.

Categories 1 and 2 of the coding system are discussed in the introduction. Two additional categories are also included. Most articles do not specify the setting that is being considered, but some do and are so cited in category 3. Availability of citations is indicated in category 4.

1. Topic

   1.1 what users are like

   1.2 what librarians are like

   1.3 what librarians need to find out from users about their information needs

   1.4 how the interview should be conducted

   1.5 the importance of the interview for successful information service

   1.6 training

   1.7 other

2. Methodology

   2.1 report of personal experience or unspecified

   2.2 interpretation of theory or research from other areas
   2.21 counseling and helping skills
   2.22 nonverbal communication
   2.23 other (for example, communication, cognitive psychology, social psychology, and sociology)

2.3 development of theory for the information interview independent of theory and research in other areas

2.4 systematic research

2.5 comprehensive consideration such as a bibliography, state-of-the-art report, or text (if this code is assigned, no others are)

3. Setting

3.1 general or unspecified

3.2 reference desk in a public or academic library

3.3 special library

3.4 online search service

4. Citations (indicate number of citations for 4.2 and 4.3 (i.e., 4.2 (26)).

4.1 no citations

4.2 citations to literature on the information interview

4.3 citations to related areas

III. BIBLIOGRAPHY

Comprehensive Considerations of the Information Interview

1. Jahoda, Gerald. The Process of Answering Reference Questions. A Test of a Descriptive Model. Tallahassee, FL: Florida State University, School of Library Science, January 1977. ED 136 769. (1.3; 1.4; 1.6; 2.4; 3.1; 4.2(6)).

   This study was conducted to determine how librarians answer reference queries and to develop instructional materials for teaching the answering process. Twenty-three science and technology reference librarians used and commented on a six-step model of the search strategy process. The model was then revised to include the following steps: (1) message selection; (2) selection of types of answer-providing tools; (3) selection of specific answer-providing tools; (4) selection of search headings; (5) answer selection; and (6) negotiation and renegotiation. An instructional module was developed for each step consisting of description and practice exercises. The modules were tested in three graduate library school reference courses and revised according to faculty and student comments. The author recommended the development of guidelines for choosing lead-in tool search sequence and specific answer-providing tools and stressed the need for empirical research. The appendices include the instructional modules, a survey of public library reference queries, and a computer-searched and printed index to reference queries. (Early work on this project was reported by Gerald Jahoda, and others, as Instruction in Negotiating the Reference Query. Tallahassee, FL: Florida State University, School of Library Science, 25 August 1975. ED 111 421.)

2. Jennerich, Elaine Zaremba. "Microcounseling in Library Education." Ph.D. dissertation, University of Pittsburgh, 1974. (1.4; 1.6; 2.21; 2.4; 3.1; 4.2(21); 4.3(29)).

   This study cites two main objectives. The first is to review the literature of library science concerned with interview training for librarians. In order to synthesize the literature, a composite picture or synthesis of the librarian-patron interview was developed, compared with a picture of a counseling interview, and subsequently used as a framework within which to develop interview training methods. The second objective is to report the design, conduct, and results of an instructional technique called microcounseling through which beginning library school students were taught interviewing skills. The implications of such training are also considered.

3. Katz, William A. "The Reference Interview" and a section on the interview associated with computer-assisted reference service. In Introduction to Reference Work, Vol. II, 3rd ed., pp. 61-80 and 210-214. New York: McGraw-Hill, Inc., 1978. (2.5)

   Characteristics of the reference interview, the reference librarian, and the user are discussed. Major headings include: Characteristics and Objectives of the User, Clarifying and Analyzing the Question, and Anticipated or Acceptable Answers. The author also outlines some of the interpersonal elements involved in the reference interview between librarian and user.

4. Lynch, Mary Jo. "Reference Interviews in Public Libraries." The Library Quarterly 48 (April 1978):119-142. (1.2; 2.23; 2.4; 3.2; 4.2(16); 4.3(18)).

   This exploratory study examined reference interviews in terms of eight questions among which were: How often does a reference librarian interview the patron who presents a reference query? When an interview does occur, what gross categories or levels of information are sought by the librarian? How often are the questions of the librarian open questions and how often are they closed questions? Actual interviews between patrons and librarians were obtained for analysis through audio recording using a wireless microphone and a radio-recorder unit. Three hundred and nine interviews transcribed from the tapes were analyzed in detail primarily through content analysis. Two models of the reference interview are a result of this investigation. In addition, the reference interviews observed are considered in the light of what has been written about interviews conducted by other professional persons. (This article is a condensed version of the author's dissertation by the same title, Rutgers University, 1977.)

5. Roloff, Michael E. "Communication at the User-System Interface: A Review of Research." Library Research 1 (1979):1-18. (2.5).

   This literature review concentrates on intrapersonal and interpersonal communication at the user-system interface. The position taken is that user-system interactions occur throughout the library, as well as within the area of traditionally defined "reference" functions, and include any of the various communication activities that occur between the user and the library staff. The importance of continued empirical investigations of communication processes in the library is stressed.

6. Rothstein, Samuel D. "Across the Desk: 100 Years of Reference Encounters." Canadian Library Journal 34 (October 1977):391-393. (2.5)

> The author provides a historical perspective as well as a review of recent literature on the reference process with primary attention to the reference interview. He traces published commentary and research from Samuel Green's paper in 1876 through an increasing commitment to user services in the early 1900's to the detailed consideration of the reference interview that is found in the literature of the last two decades.

Primary Items

Citations to items, other than those few listed above, which were judged to be of greatest value to practitioners, researchers, or teachers are included in this section. The remainder of the citations are included in the next section. All citations are coded. Thus, the reader can peruse the literature by reading the abstracts of those articles judged primary, and the entire literature is accessible through the index which is based on the codes.

7. Boucher, Virginia. "Nonverbal Communication and the Library Reference Interview." RQ 16 (Fall 1976):27-32. (1.1; 1.2; 1.4; 2.22; 3.1; 4.2(11); 4.3(19)).

> The implications for the library reference interview of nonverbal communication, particularly body movements, are explored. The interview is described as a type of communication system with nonverbal communication being only one aspect. A variety of observations are offered about nonverbal communication including cues that signal "preoccupation" versus "availability."

8. Briggs, R. Bruce. "The User Interface for Bibliographic Search Services." In The Use of Computers in Literature Searching and Related Reference Activities in Libraries, edited by F. W. Lancaster. Papers presented at the 1975 Clinic on Library Applications of Data Processing, April 29-30, 1975. Urbana-Champaign, IL: University of Illinois, 1976, pp. 56-77. (1.3; 1.4; 2.3; 2.4; 3.4; 4.1).

> The user interface was defined as the entire set of user-system interactions, from partial phrasing of information

needs to final review of results. This interface has not been studied adequately in bibliographic retrieval systems. In 1973 an NSF funded project to study this interface was begun at the University of Georgia and at the University of California at Los Angeles (UCLA). The two research teams worked independently but in parallel. Data were collected via questionnaires submitted to users and intermediaries and tape-recordings of reference interviews. Results in this paper came exclusively from the UCLA team and cover six main categories: user characteristics, intermediary characteristics, the interview process, user's questions, profile coding, and search results. Models of the existing user interface and a proposed information network are suggested. (See Zipperer, for the University of Georgia report of this study; Carmon, for the Final Report.)

9. Bunge, Charles Albert. "Seekers vs. Barriers: Getting Information to People: Your Role." Wisconsin Library Bulletin 70 (March/April 1974):76-78. (1.4; 2.1; 3.1; 4.2(1); 4.3(1)).

These notes from a talk delivered to a reference workshop include the following points: reference work is the provision of assistance to people trying to overcome barriers between themselves and the information they seek. Among the barriers are the complexity of the library, misunderstanding or lack of understanding of what librarians can and will do to help, and difficulties in communication. Difficulties in communication are due to efforts to seek self-affirmation, defensiveness, language barriers, and cross-purposes, and they cannot be eliminated. To overcome these difficulties, librarians must pay attention to the patron, have a positive self-image, and understand people better. Librarians must also get the right kinds of information from the patron, know the reference collection, be self-critical, and advertise the availability of reference services.

10. Carmon, James L. Model the User Interface for a Multidisciplinary Bibliographic Information Network. Final Report. Washington, DC: National Science Foundation, Office of Science Information, May 1975. PB-242-964. (1.3; 1.4; 2.3; 2.4; 3.4; 4.1).

This research focuses on an analysis of information seeking behaviors of users at two university based information systems--one at the University of California at Los Angeles (UCLA) and the other at the University of Georgia. It represents a recognition, based on actual operational experience, of the critical nature of the user interface to computer-readable information resources. The purpose was to identify and to formalize the procedures that a reference librarian or information specialist employs in negotiating user questions in order to determine if they could be programmed for automated systems. The work was conducted in

two phases. During the first phase, the five major functional steps of the reference process were investigated to collect both descriptive and quantitative data concerning query formulation, question translation, strategy formulation, search execution, and relevance judgment. The second phase, based on data gathered during the first, was the development of the existing user interface model and a projected network model.

11. Crum, Norman J. "The Librarian-Customer Relationship: Dynamics of Filling Requests for Information." Special Libraries 60 (March 1969): 269-277. (1.1; 1.3; 1.4; 2.1; 3.3; 4.2(7); 4.3(1)).

    The steps in the process from the time a customer asks for information until the special librarian gives him acceptable answers are analyzed. From this generalized description, there follows an examination of the major barriers to the interaction: physical, personality, psychological, linguistic, and contextual. Some suggested approaches to alleviating these barriers are offered. Establishing and maintaining a customer orientation is considered the most vital method of reducing customer-librarian barriers.

12. Dervin, Brenda and others. The Development of Strategies for Dealing with the Information Needs of Urban Residents: Phase III-Applications. Final Report. Seattle, WA: University of Washington, November 1977. ED 148 389. (1.6; 2.23; 2.4; 3.1; 4.2(1); 4.3(14)).

    This report is the culmination of the third and final phase of a project to develop strategies for dealing with the information needs of urban residents. The focus was on the information practitioner-client interaction and how practitioners can effectively deal with individual citizens when these citizens and their needs take on myriad forms at myriad times. The first two phases of the project involved research studies. Phase I studied citizens and how they use information. On the basis of the Phase I results, an approach to providing information services called the Client-In-Situation Approach, was developed. The Phase II project studied information practitioners to determine their readiness to use this approach. The purpose of the third phase was to develop training modules encapsulating the major conceptual developments and empirical findings from the two prior phases. Twenty training modules, encompassing more than 30 hours of training, were developed in such a way that any practitioner could with sufficient preparation time conduct training. The modules were then evaluated under two training conditions, with library and information agency practitioners and with library school students. Detailed results from these evaluations are presented in the report as an aid for prospective trainers.

13. Gothberg, Helen M. "Communication Patterns in Library Reference and Information Services." RQ 13 (Fall 1973):7-14. (1.4; 2.22; 2.23; 3.1; 4.2(5); 4.3(15)).

    This article points out that negotiation of the reference question is a major communication problem affecting library service. Linguistic and kinesic research, information and transactional theories, and the philosophies of Buber and Rogers are explored as potential theoretical bases for understanding the interpersonal dynamics of question negotiation. It is noted that further insight gained through research into the nature and pattern of the interpersonal encounter and a clearly defined notion of the library's role are needed.

14. Gothberg, Helen M. "Immediacy: A Study of Communication Effect on the Reference Process." Journal of Academic Librarianship 2 (July 1976):126-129. (1.4; 2.22; 3.2; 4.2(9); 4.3(15)).

    The purpose of this study was to explore the relationship between the "immediacy" of a librarian's communication during the reference interview and user satisfaction. "Immediacy" is a quality of communication that includes warmth, liking, and psychological closeness. It is theorized to be a factor in easing user frustration in the library and facilitating the user's information search. The study found that library users who were exposed to the immediate verbal-nonverbal communication of a librarian expressed more satisfaction with the reference interview and with his or her own performance in negotiating the reference question, than a user exposed to a librarian's nonimmediate communication. No significant difference was found for users' satisfaction with the actual transfer of information when exposed to the immediate versus nonimmediate communication. (This article is a condensation of the author's Ph.D. dissertation, "User Satisfaction with a Librarian's Immediate and Nonimmediate Verbal-Nonverbal Communication," University of Denver, August 1974.)

15. Gothberg, Helen M. "Training Library Communication Skills: Development of Three Videotape Workshops." Tucson, AZ: University of Arizona, November, 1977. (1.5; 1.6; 2.22; 2.23; 2.4; 3.1; 4.2(10); 4.3(14)).

    The purpose of the Librarians Communicate Project was to develop and test three two-hour workshops in communication skills for reference librarians and others. Four basic objectives were stated: (1) to develop more innovative teaching practices making use of newer media, such as videotape; (2) to provide future and practicing reference librarians with an opportunity to develop a communication style

which promotes dialogue with the patron; (3) to test whether the video medium is a feasible support system for workshops in communication; and (4) to make revisions where needed as a result of field testing and evaluation. The participatory-type workshop using videotape was found to be a feasible instructional tool for teaching communication skills.

16. Green, J. S. "GRINS, An On-Line Structure for the Negotiation of Inquiries." Studies in the Man-System Interface in Libraries, Report No. 4. Bethlehem, PA: Center for the Information Sciences, Lehigh University, September 1967. NTIS Report No. 660-089. (1.1; 1.3; 2.3; 3.4; 4.2(2); 4.3(9)).

In general, problem solutions can be found along a continuum of abstraction from the specific to the general. There is, at any given point in the development of the solution, a most efficient or optimum strategy. In information retrieval systems the ultimate solution is usually obtained at a more specific rather than at a more abstract level. The question negotiation process is viewed as an efficient preliminary strategy which enables an information seeker to obtain his information goal with the least amount of overall effort. In order for a problem solution procedure to remain efficient, a means for predicting when to change strategies must be provided. In the particular example of question negotiation this prediction is based on the rate at which the definition of the user's need develops. An on-line computer program called GRINS is described which implements the information specialist's role in negotiating a user's need. This program communicates with the user in his natural conversational idiom. When the negotiation is judged by GRINS to be as well developed as it is likely to get, a search is made of the available documents. This search produces an ordered list of the sixty-three best documents which come closest to the user's expressed need. The structure of the program is modular so that improvements may be easily made. Some such improvements are suggested.

17. Holland, Barron. "Updating Library Reference Services through Training for Interpersonal Competence." RQ 17 (Spring 1978): 207-211. (1.4; 1.6; 2.21; 3.1; 4.2(6); 4.3(11)).

Drawing upon studies from psychology, counseling, and library science, this article discusses interpersonal aspects of the reference situation which are related to the success of the individual reference encounter and the image of reference service as a whole. It is noted that most reference situations involve a request for information or assistance in research rather than for guidance, psychological help, or instruction, although some encounters may involve these factors as well. Understanding the dynamics of interpersonal relationships in order to facilitate patron success is discussed as relevant for library education.

18. Horn, Roger. "Why They Don't Ask Questions." RQ 13 (Spring 1974): 225-233. (1.1; 1.2; 1.4; 2.1; 3.2; 4.1)

    The physical layout of the library, a lack of communication between librarian and user, or constraints imposed by administrators may prevent the reference librarian from giving the best possible service. (Written in part as a response to Swope and Katzer, "The Silent Majority," 1972.)

19. Howell, Benita J.; Reeves, Edward B.; Van Willigen, John. "Fleeting Encounters--A Role Analysis of Reference Librarian-Patron Interaction." RQ 16 (Winter 1976):124-129. (1.1; 1.2; 2.23; 2.4; 3.1; 4.2(5); 4.3(7)).

    The relevance of role theory to reference services and measures of user satisfaction are discussed. A study is reported wherein clients and librarians filled out a self-administered questionnaire immediately following an interaction at the reference desk of a large university library. Variables were question asked, status of client, familiarity of client with library, how well the reference librarian pinpointed the client's needs, adequacy of amount of information received, and whether instruction was given by the librarian. Perceptions of both client and librarian were obtained for each variable. In addition, the librarian was asked "What did the patron really want?" Consensus between librarians' and clients' responses were reported as well as other analyses.

20. Jennerich, Edward J.; Jennerich, Elaine Zaremba. "Teaching the Reference Interview." Journal of Education for Librarianship 17 (Fall 1976):106-111. (1.4; 1.6; 2.21; 2.4; 3.2; 4.2(8); 4.3(1)).

    Reference service requires interpersonal skills as well as knowledge of reference tools. Yet librarians are usually not taught interviewing skills, although suggestions about training librarians to interact effectively with patrons are occasionally made. A few library schools use videotapes to record students in practice interviews so their communication patterns can be studied and improved or changed. At Baylor University, videotaping is one step in an instructional sequence designed to teach interviewing skills and to evaluate improvements. Classes meet once a week. In preparation, students read the books assigned for the week and produce five reference questions from the material. A student is arbitrarily chosen to act as reference librarian, the others act as patrons. A 30-minute session is videotaped. All involved write an evaluation, then the videotape is replayed. Each student acts as librarian in two sessions during the semester. Comparison of the two videotapes allows for assessment of improvement. Results have been encouraging:

student reaction is favorable, and student interactions with actual patrons during library practicum indicate that interpersonal skills have indeed been learned.

21. Kazlauskas, Edward. "An Exploratory Study: A Kinesic Analysis of Academic Library Public Service Points." Journal of Academic Librarianship 2 (July 1976):130-134. (1.4; 2.22; 2.4; 3.2; 4.2(6); 4.3(11)).

    After a brief introduction to the field of kinesic analysis, or the study of body movements, an exploratory study is described which analyzed the body movements of individuals at reference and circulation public service points in four academic institutions. Using a specific data-gathering form, 148 observations were made. These observational data were consolidated into typical positive and negative behaviors and several generalized behavior patterns. Possible implications for library management and research are indicated.

22. King, Geraldine B. "Open and Closed Questions: The Reference Interview." RQ 12 (Winter 1972):157-160. (1.3; 1.4; 2.1; 3.1; 4.2(1); 4.3(2)).

    Good reference librarians need to be good interviewers. Unfortunately, most librarians have not learned to use the technique of open questions to obtain information about the user and what he is looking for. Examples of open and closed questions with typical responses are given.

23. Knapp, Sara D. "The Reference Interview in the Computer Based Setting." RQ 17 (1978):320-324. (1.3; 1.4; 2.1; 3.4; 4.2(3); 4.3(7)).

    The role of the search analyst, his/her personality, and communication skills are discussed in relation to the success or failure of a computer search. It is noted that the search analyst's primary functions are analysis and reconstruction based on an understanding of the essential parameters of the user's needs.

24. Lukenbill, W. Bernard. "Teaching Helping Relationship Concepts in the Reference Process." Journal of Education for Librarianship 18 (Fall 1977):110-120. (1.4; 1.6; 2.21; 2.23; 3.1; 4.2(7); 4.3(13)).

    This paper discusses the helping relationship concept, its relationship to the reference process, and the problems of teaching the concept to pre- and in-service librarians. A teaching unit is described.

25. Mount, Ellis. "Communication Barriers and the Reference Question." Special Libraries 57 (October 1966):575-578. (1.1; 2.1; 3.1; 4.2(1); 4.3(4)).

This article cites the common problem of inquirers not asking the questions they should in order to obtain the information they need. Analyzed in the article are a wide range of causes for this phenomenon, including intellectual and psychological barriers to clear communication. The role of the reference staff in detecting irrelevant questions is described as well as some steps to take to eliminate ambiguous and misleading questions.

26. Mucci, Judith. "Videotape Self-Evaluation in Public Libraries: Experiments in Evaluating Public Service." RQ 16 (Fall 1976): 33-37. (1.4; 1.6; 2.4; 3.2; 4.3(4)).

This article deals with the question of whether videotaping can be used by librarians for self-evaluation in a public library. Individual videotaping sessions were arranged to see (1) whether videotape self-evaluation could be done without disruption of service and without discomfort to the staff, and (2) whether videotape self-evaluation could improve public service. The report describes how the videotape sessions were conducted, the reactions of librarians and users, and conclusions about the potential usefulness of videotaped self-evaluations.

27. Munoz, Joanna Lopez. "The Significance of Nonverbal Communication in the Reference Interview." RQ 16 (Spring 1977):220-224. (1.7; 2.22; 3.1; 4.2(1); 4.3(12)).

The author discusses various aspects of nonverbal communication and their relationship to the reference interview.

28. Penland, Patrick R.; Mathai, Aleyamma. Interpersonal Communication. New York: Marcel Dekker, 1974. (1.4; 1.6; 2.21; 2.23; 3.1; 4.2(21); 4.3(136)).

The purpose of this book is to integrate research findings from the field of counseling into the framework of library and information science. This publication formulates a basis for training resource specialists in interpersonal communication. It considers practical models of information processing to help the reader synthesize his/her own approach to human communication. Also discussed is the relationship that exists between interpersonal communication, group dynamics, and community development psychology.

29. Shosid, Norma J. "Problematic Interaction: The Reference Encounter." In Varieties of Work Experience: The Social Control of Occupational Groups and Roles, edited by Phyllis Langton Stewart and Muriel G. Cantor. New York: John Wiley and Sons, 1974, pp. 224-237. (1.7; 2.1; 3.1).

    Problematic aspects of the reference encounter are discussed as follows: (1) limited time and the unscheduled nature of the encounter--giving little scope to establish facts about users, their subject or library knowledge, and their needs; (2) open-ended interactions--created by organizational variables and including such factors as the physical layout of the library, type and/or lack of furniture and fittings, and limited privacy; (3) mutual establishment of participant status--affecting adherence to library rules, use entitlement, and type and degree of service; and (4) service evaluation--presenting difficulties from the librarian and user point of view.

30. Smith, Nathan M.; Allred, G. Hugh. "Recognizing and Coping with the Vertical Patron." Special Libraries 67 (November 1976):528-533. (1.1; 1.4; 2.23; 3.1; 4.3(6)).

    Vertical and horizontal models of communication are reviewed and defined in this article. Aids are given to help the librarian recognize vertical and horizontal communication and to expedite horizontal interaction with the patron who exhibits vertical tendencies in order to produce a more satisfying interaction.

31. Somerville, Arleen N. "The Place of the Reference Interview in Computer Searching: The Academic Setting." Online (October 1977): 14-23. (1.3; 1.4; 2.1; 3.4; 4.2(4)).

    The reference interview is crucial to the success of a computer search. Formulation of the search strategy and instruction of the user are the most important activities carried out during the interview. Components of the reference interview include discussion of the benefits of computer searching; when computer searching is appropriate; what the subject of the search and the reference question are, in precise terms; the limits to be placed on the search; online procedures, software features, and characteristics of various systems and databases. Search strategy should be developed with the help of the user and in accord with the preferences and decisions of the user concerning costs, coverage of the topic, emphases on precision or recall, and other concerns. Confidentiality should be discussed. If possible, the user should be present at the terminal during the search. Searchers

should make sure the results of a search are adequate and try to diagnose and correct failures so that confidence in the source is maintained.

32. Swope, Mary Jane; Katzer, Jeffrey. "The Silent Majority: Why Don't They Ask Questions?" RQ 12 (Winter 1972):161-166. (1.1; 1.2; 2.4; 3.2; 4.2(13); 4.3(3)).

This is a study conducted to determine how many library patrons are reluctant to ask questions of the library staff, and why. A sample of users at a university library were interviewed to determine what proportion of them had reference questions and which of those with questions would ask a librarian for help. It was found that 41 percent of the 119 respondents had questions and 65 percent of these would not ask a librarian for help. Respondents reported that their unwillingness to approach the librarians was due to (a) dissatisfaction with past services, (b) having too simple a question, and/or (c) not wanting to bother the librarian. In light of this it is suggested that training in communication skills and interviewing techniques should become part of a librarian's education. Library administrators must recognize the necessity of circulating the staff among users. Librarians must become aware of and attempt to change the image they have acquired in the eyes of the user.

33. Taylor, Robert S. "The Process of Asking Questions." American Documentation 13 (October 1962):391-396. (1.1; 2.3; 3.1; 4.2(4); 4.3(4)).

This paper discusses the nature of questions--their generation, their relation to retrieval systems, and their effect on the inquirer. Four levels of question formation are defined and analyzed: the actual, but unexpressed, need for information (visceral); the conscious within-brain description of the need (conscious); the formal statement of the question (formal); and the question as presented to the information system (compromised). Input and output characteristics of systems are examined for their effect on the inquirer's decision to ask a question and on the form the query takes. The investigation of six parameters governing question type and ambiguity suggests that we may be placing too much emphasis on syntactic matching of inquiry and store of answers. The inquirer's state of readiness is defined as the "state of mind" which allows a selection to be made from a series of messages. A question is seen as an indication of inadequacy on the part of the inquirer who hopes to remedy that inadequacy by calling on the information system. A major objective of information systems is to make commonplace the point of maximum usefulness where three coordinates cross: level of question, state of readiness, and available answer.

34. Taylor, Robert S. "Question Negotiation and Information Seeking in Libraries." College and Research Libraries 29 (May 1968):178-194. (1.1; 1.3; 2.3; 3.1; 4.2(1); 4.3(21)).

This report is a study of two types of question negotiation in libraries and information centers. Through taped interviews with special librarians and information specialists, five levels of information were isolated which are consciously sought and received by the librarian in the first type of question negotiation. These are (1) subject definition, (2) objective and motivation, (3) personal characteristics of the inquirer, (4) relationship of inquiry description to file organization, and (5) anticipated or acceptable answers. The second type of negotiation, self-help, is that in which the inquirer alone negotiates with the total information system. Undergraduate students in courses in the information sciences reported on this process resulting from a self-generated information need. Their reports covered decisions and strategies; the sources used, both human and print; the complexities and failures of their process; and the ambiguities of their question-asking strategies. Four such reports, including systems charts, are shown. The two types are compared with recommendations for improving the displays at the interface between the inquirer and system. (This report was originally published in Studies in the Man-System Interface in Libraries, Report Number 3. Bethlehem, PA: Center for the Information Sciences, Lehigh University, July 1967; NTIS Report No. AD-659-468.)

35. Vavrek, Bernard Frank. "Communications and the Reference Interface." Ph.D. dissertation, University of Pittsburgh, 1971. (1.5; 2.23; 2.4; 3.1; 4.2(14); 4.3(87)).

The purpose of this study was to examine the reference process as a dynamic, user-oriented system. Reference questions were treated as though comprised of two parts: (1) the initial statement of the inquirer's needs, and (2) the question resulting from reference negotiations. Content analysis was used to determine the level of question refinement necessary to enable information retrieval. The author concludes that the product of the reference interface is a search strategy which attempts to make the reference inquiry isomorphic with the classification of knowledge in the library. It is recommended that the inquirer's question provide the initial framework for reference negotiation rather than the organization of information in the library.

36. Zipperer, W. "User Interface Models for Multidisciplinary Bibliographic Information Dissemination Centers." Paper presented at the American Chemical Society National Conference, Chicago, IL, August 1975. ED 122 846. (1.3; 1.4; 2.3; 2.4; 3.4; 4.1).

Two information dissemination centers at the University of California at Los Angeles (UCLA) and the University of Georgia studied the interactions between computer-based search facilities and their users. The study, largely descriptive in nature, investigated the interaction process between data base users and profile analysts or information specialists in constructing and revising search profiles. Data were gathered from users, from intermediaries, and by tape recording search request interview sessions. Interview events were identified, labeled, and analyzed, and transition matrices were constructed for major groupings of events. On the basis of the data, presearch and postsearch models of existing interfaces were constructed. The study indicated a need for data base information support, accommodation of a wide range of users, human intermediaries, built-in diagnostic capabilities, and alternative interaction mechanisms for the user. Results of the study showed that interface for the two centers was not linear, was highly adaptive, and had an important instructional component. Particularly significant was the finding that the human intermediary is an integral part of the interface essential to its adaptive capability. (See Briggs, for UCLA report of this study; Carmon, for the Final Report.)

Additional Items

37. Braun, Carl. "Reference Interview: A Transactional Analysis Interpretation." Ohio Library Association Bulletin 47 (April 1977): 11-14. (1.4; 1.5; 2.23; 3.1; 4.1).

The purpose of this essay is to review principles of Transactional Analysis as applied to the reference interview. It is noted that a significant part of the interview lies in the initial contact, the dialogue, and the transactions that take place. Aspects of librarian responses and patron motivation are discussed in order to illustrate the use of Transactional Analysis in the reference interview process.

38. Brown, James. "A Personal Viewpoint." American Libraries 1 (January 1970): 44-45. (1.7; 2.23; 3.1; 4.1).

This article discusses the need for utilizing skillful communication processes and techniques in the library setting.

39. Burr, Robert L. "Librarians, Libraries and Librarianship: A Model." Libri 23 (1973):181-209. (1.1; 2.22; 2.4; 3.2).

The model described in this article borrows from social psychology the concept known as the "Johari Window," which is an attempt to explain how interpersonal contacts take place and what effects such contacts have on participants. Using this model among staff and students of an academic library, a survey was conducted to test two hypotheses: (1) that knowledge of the library and its functions would vary between users having a high and a low measure of satisfaction with the library; (2) that positive or negative attitudes towards librarians would be accompanied by positive or negative attitudes respectively, towards libraries. The model is also shown to be useful in identifying situations and problems as a first step to solving them. The questionnaire and survey methodology are described in detail.

40. Calabrese, Ric. "Interaction Skills and the Librarian." Illinois Libraries 55 (January 1973):8-11. (1.2; 1.4; 2.22; 2.23; 3.1; 4.1).

This article discusses ways of improving interaction skills with a special focus on the concepts of defensive and supportive communication.

41. Collins, Judith; Ward, Patricia Layzell. "Report of the Communication Games Workshop." ASLIB Proceedings 29 (July 1977):248-252. (1.6; 2.23; 3.1; 4.3(5)).

The workshop described was held as a single evening meeting of about 30 ASLIB members. "Mirror Games," "Fishbowl Games," "Going around the Room," "Experimental Exercises," and participant's reactions are discussed. The authors state as their objectives the demonstration, playing, and discussion of games that might help to improve communication within systems.

42. Crickman, Robin D. "The Helping Aspects of Training the New Information Professional." Paper presented at the annual meeting of the Association of American Library Schools, Washington, DC, January 1977. ED 139 416. (1.6; 2.23; 3.1; 4.1).

> This speech, presented in response to Ronald G. Havelock's "The Information Professional as Change Agent" at the 1977 Annual Conference of the Association of American Library Schools, is an overview of the helping aspects of training the new information professional. It contains a summary of current thinking, reviews the skills needed by information professionals, discusses the personal traits of library school students that both hinder and facilitate the acquisition of those skills, and suggests training methods for overcoming the negative traits. The need for a professional organization to provide a framework for the continuing education of library graduates is stressed.

43. Dempsey, K. "Communication Skills." In New Zealand Library Association Special Libraries Section. A Practical Approach to Your Special Library: Proceedings of a Seminar Held in Wellington, August 1972, edited by H. M. Stephen-Smith. Wellington: The Association, 1973. (1.4; 2.1; 3.1; 4.1).

> Silent communication by signs, actions, and behavior, as well as spoken and written communication, is dealt with in this article.

44. Dunlap, Florence B. "Coping with the Clam." Library Journal 97 (1 November 1972):3517-3518. (1.1; 2.1; 3.1; 4.1).

> The article describes problems librarians have with users who will not ask for what they want ("The Clam") and those who provide "more information about what he is seeking than she cares to know." Several examples are given of the difficulty librarians have in finding out what the user "really" wants to know.

45. Eichman, Thomas Lee. "The Complex Nature of Opening Reference Questions." RQ 17 (Spring 1978):212-222. (1.4; 2.3; 2.23; 3.1; 4.2(7); 4.3(18)).

> The purpose of this essay is to review communication theory models and literature from philosophy and linguistics in an attempt to supply a rational explanation for the generality of opening reference questions. Suggestions are also offered for the application of such an understanding to the task of assisting in the access to stored knowledge.

46. Halldorsson, Egill A.; Murfin, Marjorie E. "The Performance of Professionals and Nonprofessionals in the Reference Interview." College and Research Libraries 38 (September 1977):385-395. (1.2; 1.4; 2.4; 3.2; 4.2(10); 4.3(1)).

> Twenty-five sets of "indirect" and "faulty information" questions were asked at two university library reference centers, one staffed by nonprofessionals and the other by professionals. The purpose was to determine relative success of professional and nonprofessional reference staff in (1) probing beyond "indirect" questions and (2) detecting and correcting faulty information. Also considered were frequency and success of nonprofessional referrals on unanswered questions.

47. Hurst, Don S. "Reducing Communicative Interference in Reference Situations." Oklahoma Librarian 23 (October 1973):15. (1.4; 2.1; 3.1; 4.1).

> This article discusses the importance of a librarian's communication behavior to the successful dissemination of information. Interaction models are illustrated along with several other factors related to the "manner" of reference service. These include (1) effect of message intent--librarian response to a particular user's need; (2) source credibility--influencing the effectiveness of the librarian's message stimuli; (3) response time--the slower the librarian response time to verbal demands, the lower his credibility; and (4) depth of information transfer--whether enough information is given at an appropriate level.

48. Ingwersen, Peter; Johansen, Thomas; Timmerman, Povl. "A Study of the User/Librarian Negotiation Process." In Eurim II: A European Conference on the Application of Research in Information Services and Libraries; Presented by ASLIB, March 1976, RAI International Congrescentrum, Amsterdam, Netherlands, edited by W. E. Batten. London: ASLIB, 1977. (1.1; 1.2; 1.7; 2.1; 3.1; 4.2(3); 4.3(8)).

> The purpose of this experiment was to gain more information on the question negotiation process in a typical reference situation. The 20 librarians participating in the experiment were asked to "think aloud" while seeking answers to a set of test questions, and their comments were tape recorded. The verbal protocols recorded were coded according to Johansen's list of subject-types and subject-relations based on linguistic and logical factors. Details of the coding scheme are given. During the initial stage of the experiment, some 40 protocols were coded.

49. Kroll, Howard W.; Moren, Deborah K. "Effect of Appearance on Requests for Help in Libraries." American Libraries 8 (October 1977):489. (1.2; 2.23; 2.4; 3.2; 4.1).

This article describes a study involving eight public libraries in the U.S. which were visited by an experimenter dressed as a college student and, two weeks later, as an "unconventional enquirer." Librarians were approached for the same information each time. The results indicate that, contrary to expectations, a deviant-appearing person is just as likely to receive prompt, helpful, and friendly service as a conventionally dressed person.

50. Lessem, Ronnie. "Marvelous at Producing What I Didn't Want." Library Association Record 78 (November 1976):531. (1.2; 2.1; 3.1; 4.1).

A user's description of his attempt to find specific information, the unhelpfulness of librarians who tried to help him, and his serendipitous discovery of what he wanted. He also pleads that library education should try to improve the situation.

51. Lopez, Manuel D.; Rubacher, Richard. "Interpersonal Psychology: Librarians and Patrons." Catholic Library World 40 (April 1969): 483-487. (1.5; 2.23; 3.2; 4.2(3); 4.3(3)).

Six reference interviews were tape recorded with the librarians' permission. In all interviews a confederate presented the librarian with the same "personal" problems. Patron satisfaction was measured by having the confederate indicate whether he would or would not "return to see the librarian." The librarians' interpersonal functioning levels were obtained by using the Rubacher Interpersonal Communication Scales for Librarians. The confederate said he would return to see the librarian for the three librarians with higher functioning levels and that he would not return for the three librarians with lower functioning levels.

52. Lynch, Beverly P. "Networks and Other Cooperative Enterprises: Their Effect on the Function of Reference." RQ 15 (Spring 1976): 197-202. (1.5; 2.1; 3.1; 4.2(3); 4.3(2)).

The function of reference service and the processes involved in traditional search methods are examined in this article. As the library's information system expands to include remote data bases and services provided by other libraries, it is noted that searching will be influenced by such matters as accuracy in determining the user's information

need and explicit formulation of search strategy. Little opportunity for dialogue between patron and librarian in the network search means that translation of user clues is more difficult and the success of the process relies on well-negotiated questions.

53. McFadyen, Donald. "The Psychology of Inquiry: Reference Service and the Concept of Information Experience." Journal of Librarianship 7 (January 1975):2-11. (1.7; 2.23; 3.1; 4.2(4); 4.3(8)).

Just as human activity includes both the sciences and the humanities, so reference inquiries reflect a spectrum of needs, including both information and experience, respectively. Although information and experience are mutually interdependent, they represent different orders of consciousness and "logic." Experiential inquiries must therefore be matched by experiential, i.e., open-ended, techniques of question negotiation and search strategy.

54. McGarry, K. Communication, Knowledge and the Librarian. London: Clive Bingley; Hamden, CT: Linnet Books, 1975. (1.7; 2.22; 2.23; 3.1; 4.2(12); 4.3(193)).

This book analyzes the information-seeking behavior of people, how people communicate within groups and groups with each other, and the implications for librarianship. It is noted that librarianship is a personal service where encounters with other human beings are the end product. Yet, insufficient attention has been given to the profession's social role or the importance of the interpersonal situation and the communication problems it introduces.

55. Murphy, Marcy; Nilon, Nancy M. "The Reference/Advisory Interview: Its Contribution to Library-User Education." In Educating the Library User, edited by John Lubans. New York & London: R.R. Bowker Company, 1974, pp. 287-306. (1.1; 1.4; 1.5; 2.23; 3.1; 4.2(4); 4.3(18)).

This paper addresses the question of how the reference/advisory interview contributes to educating the library user. It is suggested that the interview can contribute to the user's education in a number of special ways, that learning the skills and techniques for encouraging open interpersonal communication channels are of special importance to public service librarians, and finally, that in the field of librarianship understanding of how to conduct the actual interface with the patron remains to be systematically developed in library schools, on the job, and in continuing education courses. The

focus is on the interview itself as an educational medium, i.e., the exchange which takes place between the librarian and the user before the retrieval of information begins.

56. Neill, Samuel Desmond. "The Contact Factor." Canadian Library Journal 30 (January/February 1973):48-54. (1.5; 2.1; 3.1; 4.3(13)).

The author discusses the need for librarians to better meet clients' needs. He emphasizes the importance of face-to-face contact and the reasons why it is needed. A few suggestions are made about the setting for and the nature of interactions with clients.

57. Neill, Samuel Desmond. "Problem Solving and the Reference Process." RQ 14 (Summer 1975):310-315. (1.5; 2.23; 3.1; 4.2(1); 4.3(4)).

This article relates J. P. Guilford's operational model for problem solving in The Nature of Human Intelligence to the basic operations that take place in conducting a query negotiation and search. It is shown that the reference librarian must have the ability to engage in both convergent and divergent thinking, and that further study of the thought process involved in reference work is needed to improve teaching and practice of reference service.

58. Peck, Theodore P. "Counseling Skills Applied to Reference Services." RQ 14 (Spring 1975):233-235. (1.4; 2.21; 3.1; 4.3(2)).

Reference librarians should look to counseling techniques worked out in thousands of individual situations for ways to freshen the reference interview.

59. Pelley, Shirley. "The Reference Game or Twenty Questions." Oklahoma Librarian (January 1973):10+.

A copy of this item was not obtained.

60. Penland, Patrick R. "The Interview as Communication." Library Occurent 24 (May 1974):422-424. (1.4; 2.21; 2.23; 3.1; 4.3(6)).

In discussing the potential of the interview as a powerful tool for resource specialists, the author draws upon communication and counseling theory to develop facilitative tactics that can be used in the context of the reference interview.

61. Penland, Patrick R. Communication for Librarians. Preliminary Edition. Pittsburgh, PA: University of Pittsburgh, 1971. (1.7; 2.23; 2.3; 3.1; 4.2(6); 4.3(246)).

This text is a preliminary work in communication and is designed to help the library profession address itself to significant communication problems. As they relate to the library and information sciences, the three major areas of communication science covered are: (1) history and theory of communication and culture, organization and function of communication institutions, and communication structures in biological and social organization; (2) transfer of meaning, design, and processing of messages in different media, analysis of message content and systems; and (3) individual behavior, social interaction and experience, attitude formation and change, public opinion and collective behavior, and the congruence of exposure to various messages.

62. Penland, Patrick R. Interviewing for Counselor and Reference Librarians. Pittsburgh, PA: University of Pittsburgh, 1970. (1.4; 1.5; 2.21; 2.23; 3.1; 4.2(8); 4.3(39)).

Interviewing as it is developed in this publication is a disciplined encounter technique for counselors and reference librarians who wish to be more effective in serving the individual patron. Two polar types of patrons are identified: those who will not talk, and those who will not stop talking. Without training, librarians tend to rush patrons to the books rather than take the time to encourage the patron to discuss his purposes and interests. The following subjects are discussed: (1) orientation to the interview, (2) patron-librarian interface, (3) counseling in librarianship, (4) interpersonal aspects of librarian counseling, (5) psychological dimensions of librarian counseling, and (6) interview question analysis. The appendices contain examples of the non-directive interview, the directive interview, and functional interviewing.

63. Penland, Patrick R. "Overcoming the Frigidity of Special Librarians." Special Libraries 62 (January 1971):1-7. (1.2; 2.21; 2.23; 3.3; 4.2(1); 4.3(7)).

In striving for effective information handling techniques, traditional special librarians have neglected factors of relevance that would transform information into meaning. A general theory and taxonomy of human communication is discussed, within which the information handling propensities of the special librarian can be evaluated for relevance to the axioms of library and information science. A theoretical position is developed out of the social function of library

and information science, while the taxonomy is related to library situations or conditions (intra-, inter-, and audience-communication) within which communication occurs.

64. Powell, Janice J. "Effective Communications: The Key to Reference Service." Hawaii Library Association Journal 27 (June 1970): 3-5. (1.4; 2.23; 3.1; 4.1).

This article discusses a communications seminar held at the University of Hawaii that was part of a program to develop reference techniques. It was offered as an opportunity for librarians to observe and discuss weaknesses and strengths in their own and fellow staff members' interaction skills.

65. Pritchard, Hugh. "Sensitivity at the Reference Desk." RQ 11 (Fall 1971):49-50. (1.4; 2.1; 3.1; 4.1).

The author lists some of the human problems dealt with by librarians in the reference setting in order to sensitize librarians to their own feelings about user needs.

66. Rapoza, Rita S. "Teaching Communication Skills." RQ 10 (Spring 1971):218-220. (1.5; 1.6; 2.23; 3.1; 4.2(2); 4.3(3)).

This report discribes an instructional program based on communication techniques applied to the library reference interview. The objective of the program was to increase student awareness of verbal and nonverbal communication patterns that helped build a relationship with the patron, as well as those patterns which were irrelevant and possibly destructive. Students subsequently evaluated the instructional units favorably.

67. Saunders, Peggy; Baum, Sara M. "Nonverbal Communication in Library Question-Negotiating." In Knowledge and Its Organization, edited by David Batty. College Park, MD: University of Maryland, 1976. (1.1; 1.2; 2.22; 2.23; 3.1; 4.2(1); 4.3(15)).

This paper concentrates primarily on body motion (eye contact and facial expressions, in particular), proxemics, and paralanguage as they relate to the interaction that occurs between a patron and a librarian in the question negotiation process. The author's stated goal was to identify and explore fundamental nonverbal communication cues that information professionals could utilize. Since little has been written on this aspect of the question negotiation process, an attempt was made to apply results from various psychological studies of nonverbal communication.

68. Sankaraiah, K. "The Inquirer and the Reference Interview." Annals of Library Science and Documentation 22 (September 1975):133-135. (1.1; 1.2; 1.4; 2.1; 3.1; 4.2(3); 4.3(2)).

This article discusses the widespread belief that users cannot frame their inquiries in a precise manner. The reference interview is described as the meeting of two personalities, with the result of the interaction dependent on the traits of each, as well as the type of library and the philosophy of reference service that is employed.

69. Smith, Dorman. "A Matter of Confidence." Library Journal 97 (April 1972):1239-1240. (1.1; 1.2; 1.4; 2.1; 3.1; 4.2(5)).

The author posed as a college student looking for information on the personal life of a living homosexual writer, but unwilling to describe his information need to the librarian. He describes his experiences and discusses a number of aspects of how librarians should handle the information interview.

70. Smith, Nathan M.: Fitt, Stephen D. "Vertical-Horizontal Relationships: Their Application for Librarians." Special Libraries 66 (November 1975):528-531. (1.4; 2.23; 3.1; 4.2(1); 4.3(3)).

Communication is an important daily aspect of a librarian's profession. The horizontal relationship (equal-equal) is described and a distinction is drawn between it and the vertical relationship (superior-inferior). The horizontal relationship is an important communication concept which, when mastered by the librarian, accrues many personal satisfactions.

71. Shosid, Norma J. "Freud, Frug and Feedback: Am I Communicating?" Special Libraries 57 (October 1966):561-563. (1.4; 2.22; 2.23; 3.1; 4.3(9)).

This article discusses nonverbal communication theory as a basis for improving librarian-user communication. Awareness of feedback is noted as the key element. Cited in this article is a study conducted at the University of California at Los Angeles (UCLA) which attempted to determine whether the reference encounter provided a form of face-to-face social interaction in which nonverbal content could be investigated. Preliminary investigations set out to see (1) if nonverbal communication in the reference encounter could be observed, and (2) if any pattern emerged.

72. Tibbets, Pamela. "Sensitivity Training--A Possible Application for Librarianship." Special Libraries 65 (December 1974):493-498. (1.2; 1.4; 1.6; 2.23; 3.1; 4.3(8)).

The author describes sensitivity training and its potential usefulness to librarians.

73. Totten, Herman L. "The Nature of Interpersonal Communication." North Carolina Libraries 31 (Fall 1973):18-21. (1.7; 2.23; 3.1; 4.1).

Drawing from communication theory, the author discusses and expands upon three ingredients important to effective interpersonal communication: multiple channels, feedback, and interaction.

74. Vavrek, Bernard Frank. "The Nature of Reference Librarianship." RQ 13 (Spring 1974):213-217. (1.6; 2.23; 2.3; 3.1; 4.2(1); 4.3(3)).

The author discusses a theory of reference service with emphasis on communication theory and research.

75. Vavrek, Bernard Frank. "Reference Service: Is the Medium the Message?" RQ 8 (Fall 1968):37-38. (1.7; 2.1; 3.1; 4.1).

Reference librarians should educate clients in the use of the library as well as find information for them. Utilizing the referral process as a learning situation, the client should be given instruction on available sources of information.

76. Wilkin, Anne. "Personal Roles and Barriers in Information Transfer." In Advances in Librarianship, vol. 7, edited by Melvin J. Voight and Michael H. Harris. New York: Academic Press, 1977, pp. 257-297. (1.7; 2.23; 3.1; 4.2(4); 4.3(90)).

This article discusses the role of library and information services in providing an important link between sources and users of information. It is noted that there is still much to discover about the way in which these services interact with the many other channels through which information can be transferred. The literature from anthropology, sociology, organizational theory, management science, and library and information science is examined. A number of personal roles and barriers operating in the information transfer process are examined.

IV. SUBJECT INDEX

All articles are indexed according to the coding system described in Section II. All citations in the bibliography are numbered consecutively, and it is those citation numbers that are listed below for each code.

1. Topic

   1.1 what users are like
   7, 11, 16, 18, 19, 25, 30, 32, 33, 34 / *39, 44, 48, 55, 67, 68, 69

   1.2 what librarians are like
   4, 7, 18, 19, 32 / 40, 46, 48, 49, 50, 63, 67, 68, 69, 72

   1.3 what librarians need to find out from users about their information needs
   1, 8, 10, 11, 16, 22, 23, 31, 34, 36 /

   1.4 how the interview should be conducted
   1, 2, 7, 8, 9, 10, 11, 13, 14, 17, 18, 20, 21, 22, 23, 24, 26, 28, 30, 31, 36 / 37, 40, 43, 45, 46, 47, 55, 58, 60, 62, 64, 65, 68, 69, 70, 71, 72

   1.5 the importance of the interview for successful information service
   15, 35 / 37, 51, 52, 55, 56, 57, 62, 66

   1.6 training
   1, 2, 12, 15, 17, 20, 24, 26, 28 / 41, 42, 66, 72, 74

   1.7 other
   27, 29 / 38, 48, 53, 54, 61, 73, 75, 76

2. Methodology

   2.1 report of personal experience or unspecified
   9, 11, 18, 22, 23, 25, 29, 31 / 43, 44, 47, 48, 50, 52, 56, 65, 68, 69, 75

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*Citations preceding the slash mark are in one of the first two sections of the bibliography--Comprehensive Considerations or Primary Items. Citations following the slash mark are in the third section--Additional Items.

2.2 interpretation of theory or research from other areas
2.21 counseling and helping skills
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2.22 nonverbal communication
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2.23 other (for example, communication, cognitive psychology, social psychology, and sociology)
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*The number of citations is given in parentheses.

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